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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,608	10/15/2003	Rudolph S. Fortuna	45054.00.053	5108

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EXAMINER

LE, MARK T

ART UNIT PAPER NUMBER

3617

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,608

Applicant(s)

FORTUNA, RUDOLPH S.

Examiner

Mark T. Le

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/25/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohr (US 5,829,359) in view of Stevens (US 3,348,501).

Dohr discloses a hopper car discharge gate assembly, similar to that recited in the instant claims. It is noted that the gate frame of Dohr is formed with sloping sides members 18, 20; therefore, the resulted discharge opening of the gate assembly is relatively small.

Stevens discloses a hopper car discharge gate assembly; wherein, side members 28,30 of the gate frame are formed vertically and aligned with the hopper opening; therefore, the resulted discharge opening is larger. See lines 41-48 of Stevens; wherein, it is indicated that gate discharge openings having dimensions of 27" by 63" (1700 square inches) are known in the art.

In view of Stevens it would have been obvious to one skilled in the art to make the gate discharge opening of Dohr larger (i.e. 1700 square inches) by forming the frame side members vertically and in alignment with the hopper opening, in a manner similar to that taught by Stevens, so as to facilitate rapid discharging.

Regarding the instant claimed seal structure, broadly recited in instant claims 2, 11 and 28, note that any structure of Dohr that prevents or limits the material in the hopper from leaking out around the gate of Dohr is readable as a seal structure as claimed.

Regarding the instant claimed support members, recited in instant claims 3, 4, 13 and 27, consider the gate support members shown in Figure 1 of Dohr. As to the instant claimed low friction material for enhancing sliding, as recited in claims 4, 13, 27, note that anti-friction materials used for reducing sliding frictions, such as low friction plastics, and Teflon coatings, are well known (Official Notice is taken); and it would have been obvious to one skilled in the art to select a well known low friction material for use in the structure of Dohr for reducing sliding frictions.

Regarding the instant claimed additional support along the center line of the gate assembly, as recited in instant claims 12 and 26, consider two additional middle supports 40 of Stevens for a stronger support; however, as a matter of common sense, it would have been obvious to one skilled in the art to reduce the number of the middle supports to one middle support so as to reduce construction materials and obstructions to the gate opening. Also note that when only one middle support is to be used, it would have been obvious to one skilled in the art to center the one middle support along the center line of the gate assembly so as to achieve a better load distribution between the side and middle supports.

Regarding the instant claimed tamper proof seal arrangement with a visual indication, as recited in instant claims 25 and 39, consider seal 90 of Dohr.

Regarding the instant claimed side frame members including first, second and third legs arranged as recited in instant claims 19, 21, 22, 36 and 38, it is noted that the instant claimed side frame members are merely in the form of conventional C-shape structural channels that are commonly used for added strengths in framing constructions (Official Notice is taken), and it would have been obvious to one skilled in the art to select such well known C-shape structural channels, e.g. from available stock materials, with proper cross-sectional dimensions for adequate strengths for forming the gate frame of Dohr, as modified, so as to enhance the structural integrity of the gate assembly.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Le whose telephone number is 703-308-3663. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark T. Le
Primary Examiner
Art Unit 3617

mle
8/30/04